

Micro-Channel Water Cooled Single Bar Diode Laser (QCW)



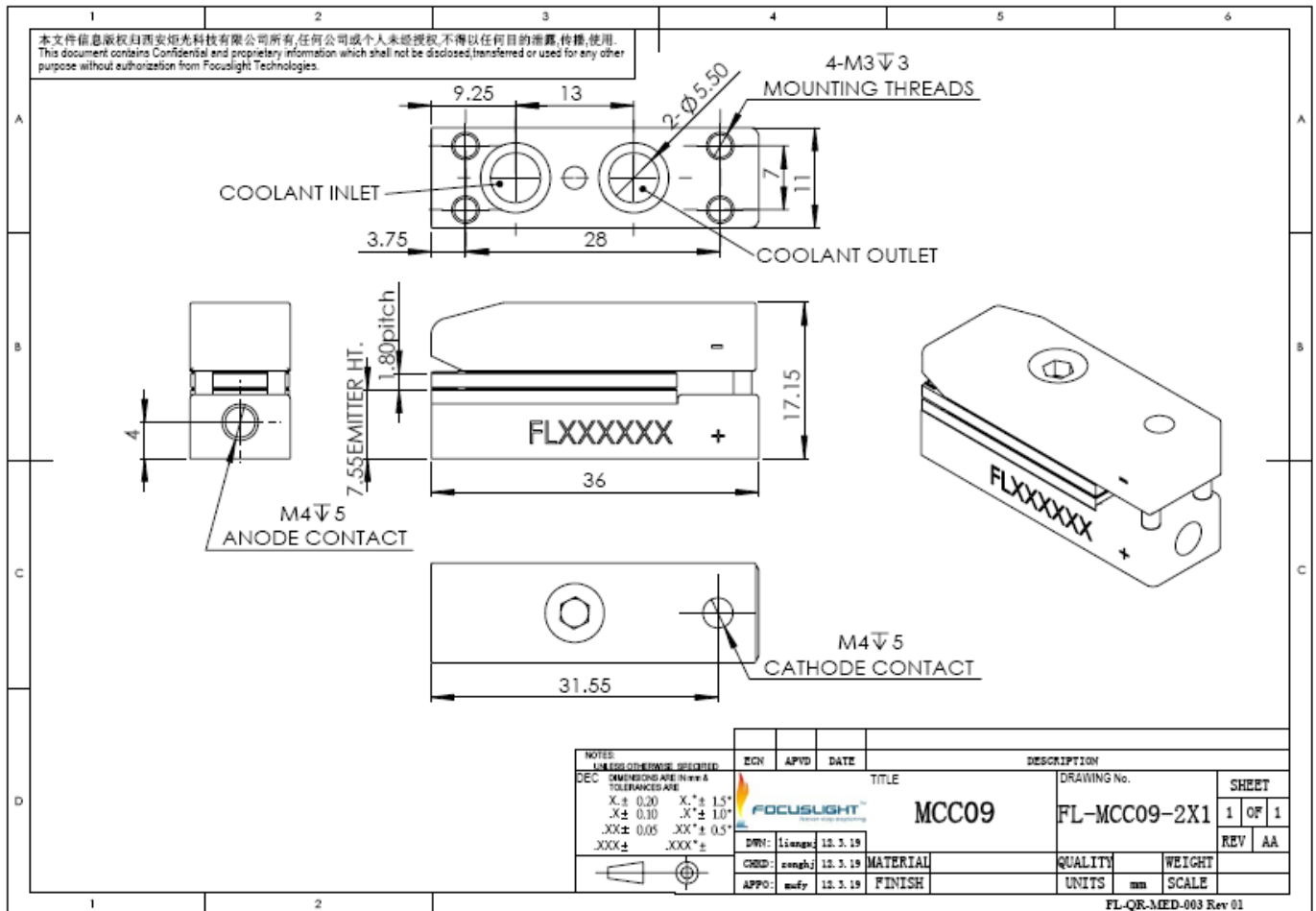
Features

- Long lifetime
- Low smile
- High power
- Narrow spectrum

Applications

- Pumping
- Scientific research
- Industry

Device Dimension (mm)



This structure drawing is only for reference. For any other special requirement, please feel free to contact us.

Micro-Channel Water Cooled Single Bar Diode Laser (QCW)

Specification

Module Type ¹	Units	FL-MCC09-150-808(Q)	FL-MCC09-200-808(Q)	FL-MCC09-250-808(Q)	FL-MCC09-200-940(Q)	FL-MCC09-250-940(Q)	FL-MCC09-300-940(Q)
Optical ^{3,7}							
Center Wavelength λ	nm	808	808	808	940	940	940
Wavelength Tolerance	nm	± 3	± 3	± 3	± 5	± 5	± 5
Output Power ²	W	150	200	250	200	250	300
Spectral Width FWHM	nm	≤ 4	≤ 4	≤ 3.5	≤ 6	≤ 4	≤ 6
Spectral Width FW90%E	nm	≤ 6	≤ 6	≤ 6	≤ 8	≤ 6	≤ 8
Fast Axis Divergence(FWHM) ^{4,6}	degree	35	35	35	35	35	35
Slow Axis Divergence (FWHM)	degree	8	8	8	8	8	8
Pulse Width	ms	≤ 0.3	≤ 0.2	≤ 0.2	≤ 0.3	≤ 0.2	≤ 0.2
Duty Cycle	%	≤ 10	≤ 10	≤ 10	≤ 10	≤ 8	≤ 4
Polarization Mode	-	TE	TE	TE	TE	TE	TE
Wavelength Temp. Coefficient	nm/°C	-0.28	-0.28	-0.28	-0.33	-0.33	-0.33
Electrical Parameters ^{3,7}							
Operating Current I_{op}	A	≤ 160	≤ 180	≤ 250	≤ 200	≤ 250	≤ 300
Threshold Current I_{th}	A	≤ 15	≤ 30	≤ 26	≤ 18	≤ 18	≤ 18
Operating Voltage V_{op}	V	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2	≤ 2
Slope Efficiency	W/A	≥ 1	≥ 1.1	≥ 1.15	≥ 1.1	≥ 1.1	≥ 1.1
Power Conversion Efficiency	%	≥ 45	≥ 50	≥ 50	≥ 50	≥ 50	≥ 50
Thermal Parameters							
Operating Temperature	°C	15~30	15~30	15~30	15~30	15~30	15~30
Storage Temperature ⁵	°C	0~55	0~55	0~55	0~55	0~55	0~55
Coolant	-	Deionized Water	Deionized Water	Deionized Water	Deionized Water	Deionized Water	Deionized Water
Flow Rate/Bar	L/min	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7	0.4-0.7
Max Inlet Pressure	kPa	380	380	380	380	380	380
Resistivity	M Ω *cm	0.2-0.5	0.2-0.5	0.2-0.5	0.2-0.5	0.2-0.5	0.2-0.5

¹Explanation for the name of Module Type: FL(abbreviation of Focuslight) –MCC09(structure code) -150(output power) -808(center wavelength)(Q:QCW).

²Reduced lifetime if used above nominal operating conditions.

³Data at 25°C temperature, unless otherwise stated.

⁴For fast axis collimation: divergence <0.5°.

⁵A non-condensing environment is required for storage and operation below ambient dew point

⁶For smile requirements, please contact us.

⁷If there are any other requirements, please contact us.



Focuslight Technologies Co., Ltd.

Add: No.17 Xinxu Road, New Industrial Park
Xi'an, Shaanxi, P.R.China 710119

Tel: +86-29 8888 0786

Fax: +86-29 8888 7075

Email: sales@focuslight.com.cn

Website: www.focuslight.com.cn

Copyright ©2009 Focuslight. All rights reserved.

